

*H. Everett,*

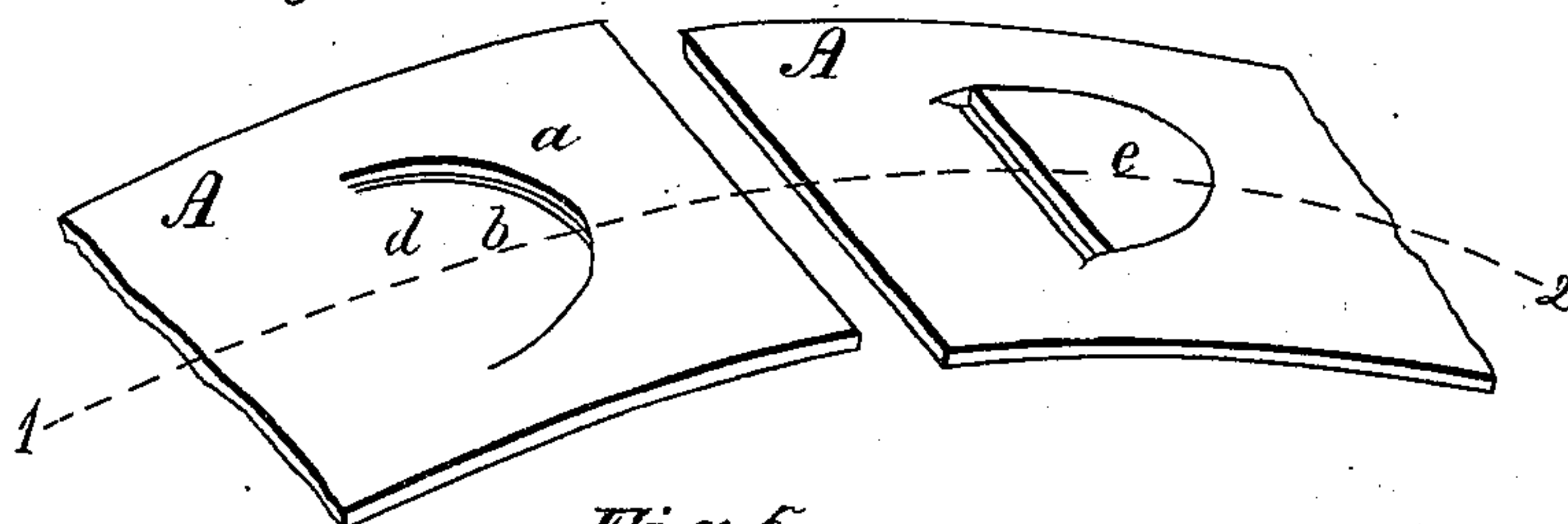
*Fastening for Metal Vessels.*

*No 85,438.*

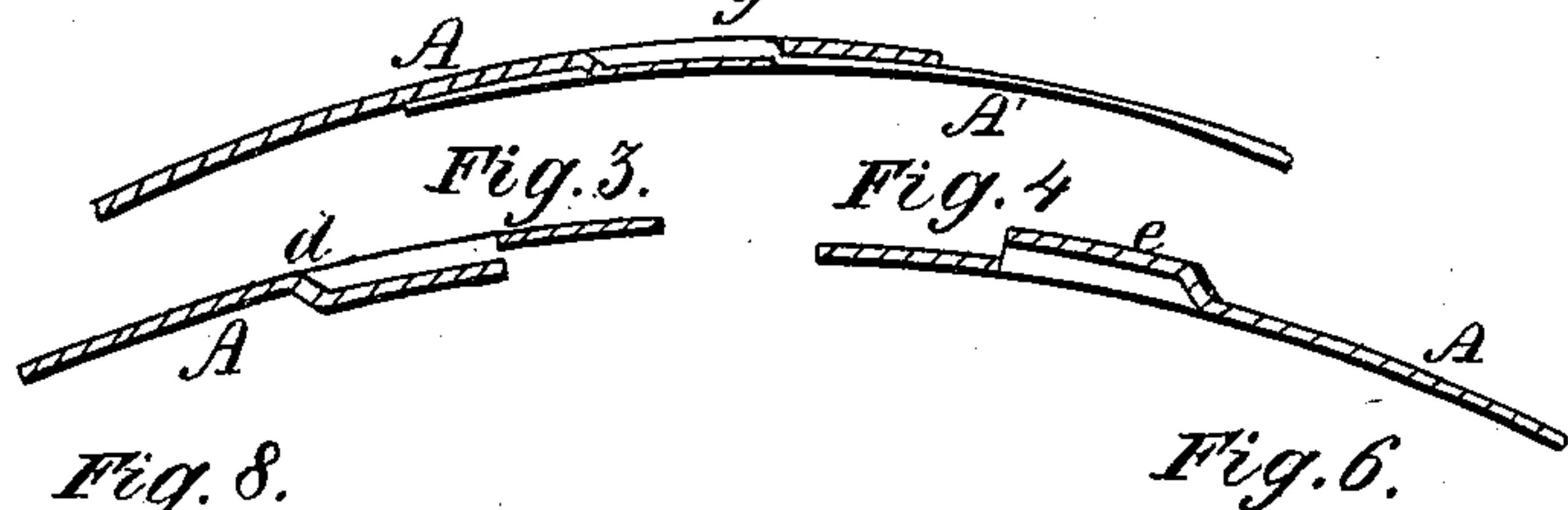
*Patented Dec. 29, 1868.*

*Fig. 1.*

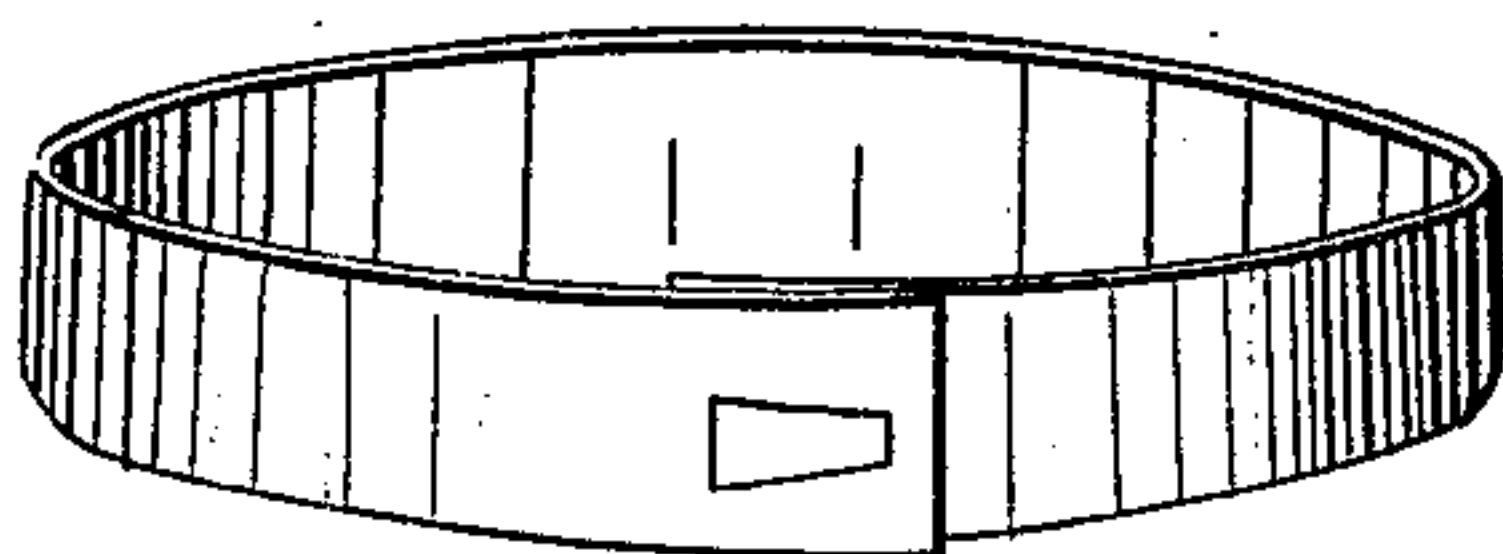
*Fig. 2.*



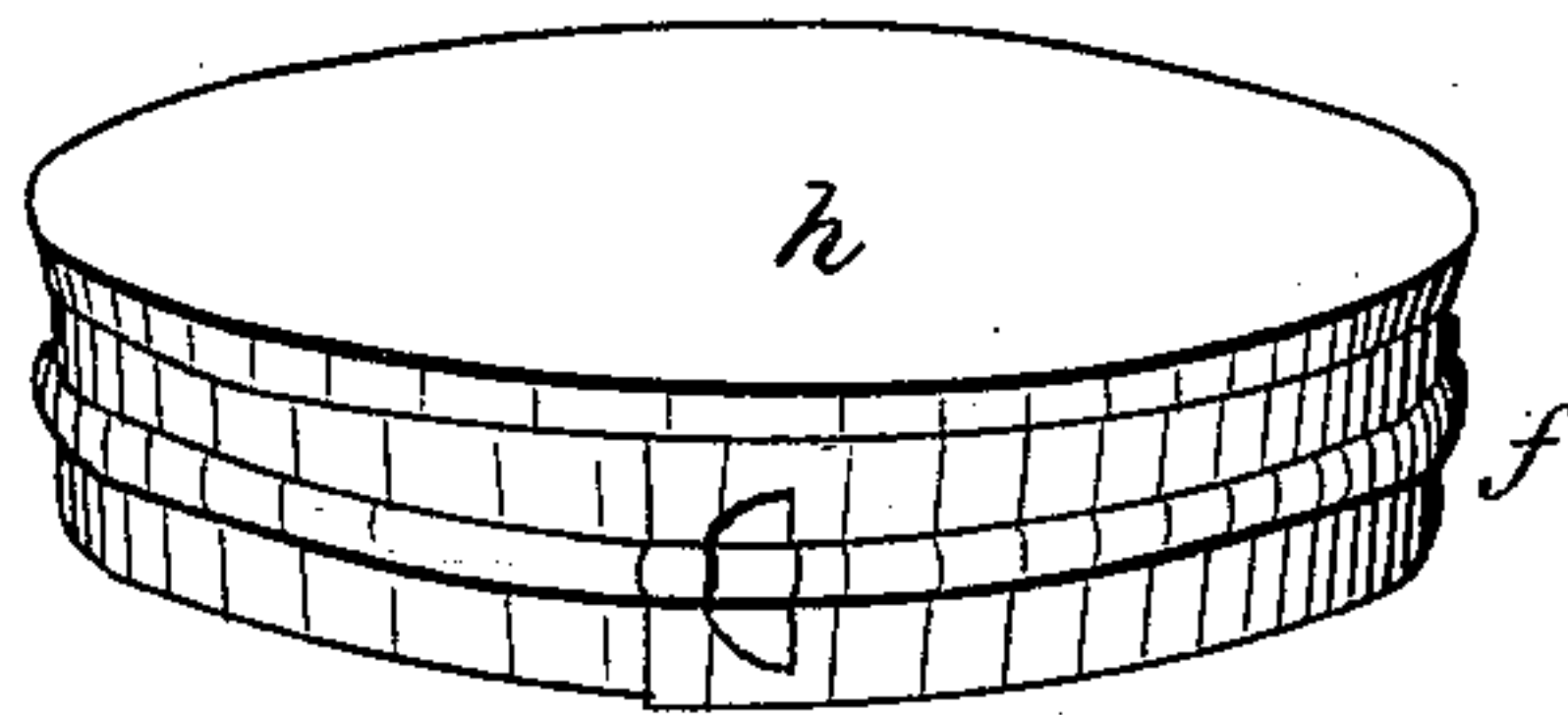
*Fig. 5.*



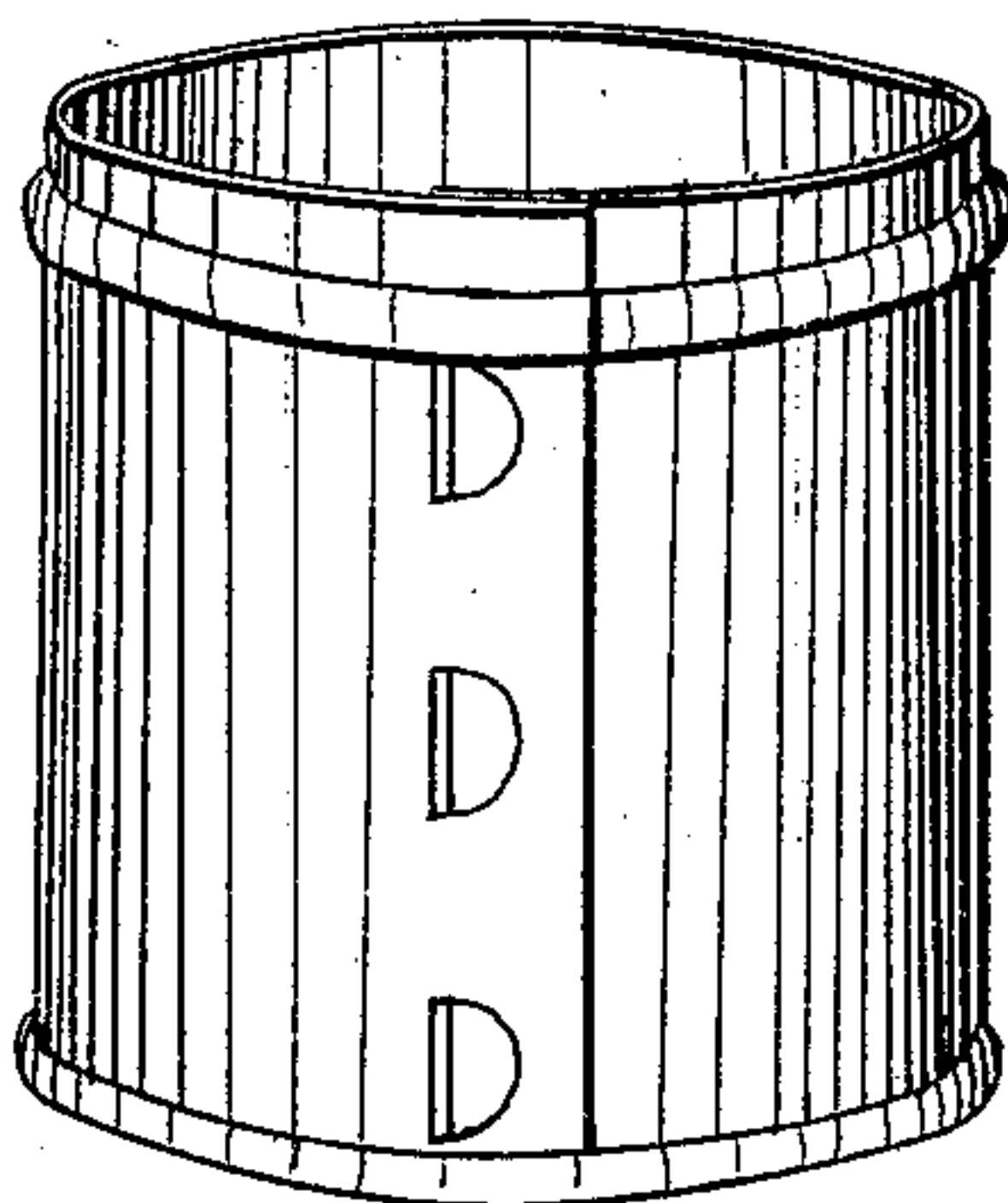
*Fig. 8.*



*Fig. 6.*



*Fig. 7.*



*Witnesses.*

*Wm A. Lail.*  
*John Parker*

*Inventor.*

*H. Everett*  
*by his Attorney*  
*Henry Howson.*

# United States Patent Office.

HORACE EVERETT, OF PHILADELPHIA, PENNSYLVANIA.

Letters Patent No. 85,438, dated December 29, 1868.

## IMPROVEMENT IN FASTENING FOR SHEET-METAL JOINTS.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern :

Be it known that I, HORACE EVERETT, of Philadelphia, Pennsylvania, have invented a Fastening for Sheet-Metal; and I do hereby declare the following to be a full, clear, and exact description of the same.

My improved fastening consists of a lip, formed on one end of a strip of metal, and fitted into an incision, or on to an incision and pocket, formed on another strip, or on the opposite end of the same strip, all substantially as described hereafter, so as to form a tight joint, without the aid of solder, for boxes, tubes, &c., of sheet metal.

In order to enable others skilled in the art to make and use my invention, I will now proceed to describe the manner of carrying it into effect, reference being had to the accompanying drawing, which forms a part of this specification, and in which—

Figures 1 and 2 are perspective views, showing two ends of a strip of metal prepared for being connected together according to my improvement;

Figures 3 and 4, longitudinal sections on the line 1-2, figs. 1 and 2;

Figure 5, the same, showing the two ends of the strip united;

Figure 6 illustrates my invention as employed in the construction of a shallow box or box-lid;

Figure 7, the invention used in uniting the strip forming the body of a deeper box; and

Figure 8, a modification of my invention.

Similar letters refer to similar parts throughout the several views.

On reference to figs. 1, 2, 3, 4, and 5, A and A' represent the two ends of a strip of tinned plate, such, for instance, as is employed in making the sides of a blacking-box, or of the lid of a box, and in the end, A, is made, by a suitable instrument, a semicircular incision, *a*, the lip *b* thus produced being depressed below the other portion of the strip, by making a bend at *d*, which extends transversely from one end of the semicircular cut to the other. (See figs. 1 and 3.)

The other end, A', of the strip is cut transversely to an extent sufficient to admit the lip *b*, and simultaneously with the making of this cut, a pocket is swaged or otherwise formed on the under side of the end, A', of the strip, of a shape corresponding with that of the lip.

The two ends of the strip are now so adjusted that

the end, A, will pass over the end, A', while the lip *b* will pass through the incision *a*, the lip taking its place in the recess, on the under side of the end, A', while the projection formed on the upper side of the latter fits in the opening of the end, A, of the strip, which is now placed over a suitable rest or anvil, and after a smart blow or suitable pressure is imparted to the parts thus fitted together, the joint will be complete, and the ring may be subjected to the action of suitable rolls for forming the rib *f*, fig. 6, which adds to the security of the joint, or, if desired, the top, *h*, of the lid or box, fig. 6, may be secured to the side simultaneously with the making of the rib *f*, and by the same machine by which the latter is formed.

It will be seen that the shoulder formed by bending the lip fits and bears against the edge of the cut made in the opposite end of the metal, the ready withdrawal of the lip being thus prevented.

Although I have described a recess as being formed on the under side of the end, A', simultaneously with the making of the incision *a*, it should be understood that this is not absolutely necessary in carrying out my invention, as the said recess for the reception of the tongue can be as effectually formed by the blow or pressure which completes the fastening.

It is not essential that the lip *b* of the end, A, should be of a semicircular form. It may be of the shape illustrated in fig. 8, for instance, or any other form which may be deemed appropriate.

In making deep boxes or cans, two or more lips and corresponding incisions, may be used, three being shown in fig. 7.

It will be evident that my invention is applicable to the construction of pipes, and other objects of sheet-metal, in which unsoldered joints are desirable.

I claim as my invention, and desire to secure by Letters Patent—

A fastening, composed of a lip, *b*, on one end of a strip of metal, and fitted to a pocket, formed by cutting and indenting another strip, or the opposite end of the same strip, all substantially as described.

In testimony whereof, I have signed my name to this specification, in the presence of two subscribing witnesses.

Witnesses:

HORACE EVERETT.

JOHN WHITE,  
C. B. PRICE.